### COMMONWEALTH OF KENTUCKY

### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF SOUTH SHORE WATER WORKS COMPANY FOR AN ADJUSTMENT OF RATES

CASE NO. 2011-00039

### NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of June 1, 2011, the attached report containing the findings and recommendations of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding.

Jeff Deroven

**Executive Director** 

Public Service Commission

211 Sower Boulevard

P.O. Box 615

Frankfort, Kentucky 40602

cc: Parties of Record

#### STAFF REPORT

#### ON

#### SOUTH SHORE WATER WORKS COMPANY

#### CASE NO. 2011-00039

South Shore Water Works Company ("South Shore") has applied to the Commission for authority to adjust its water rates. To evaluate the requested increase, Commission Staff performed a limited financial review of South Shore's test period operations for the calendar year ending December 31, 2010. The scope of Commission Staff's review was limited to obtaining information as to whether the test-period operating revenues and expenses were representative of normal operations. Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

Mark Frost and Eddie Beavers of the Commission's Division of Financial Analysis performed the limited review. This report summarizes the results of their review and their recommendations. Mr. Beavers calculated the pro forma revenue adjustment and is responsible for the calculation of the rates. Mr. Frost is responsible for all pro forma operating expense adjustments and the revenue requirement determination.

Appendix A to this report is South Shore's proposed pro forma operating statement. Commission Staff's proposed pro forma operating statement for South Shore is shown in Appendix B. Appendix C contains an explanation of each pro forma adjustment rejected or proposed by Commission Staff.

The Commission has historically used an operating ratio approach<sup>1</sup> to determine the revenue requirement for small, privately-owned utilities. This approach is used primarily when there is no basis for a rate-of-return determination or the cost of the utility plant has fully or largely been funded through contributions. Commission Staff finds that the operating ratio method should be used to determine South Shore's revenue requirement. Commission Staff further finds that an operating ratio of 88 percent will allow South Shore sufficient revenues to cover its reasonable operating expenses and to provide for reasonable equity growth.

Using an 88-percent operating ratio and allowing for the effects of state and federal income taxes on net operating revenues, South Shore determined that its pro forma operations support a revenue requirement from rates of \$870,747, which is \$220,450, or 33.9 percent, over South Shore's normalized revenues from rates of \$650,297.<sup>2</sup> In reviewing South Shore's calculations, Commission Staff discovered an addition error. Correcting for this error, Commission Staff determined that South Shore's pro forma operations actually support a revenue requirement from water rates of \$934,676, which is \$284,379, or 43.7 percent, over South Shore's normalized revenues.

Operating Ratio is defined as the ratio of expenses, including depreciation and taxes, to gross revenues.

<sup>&</sup>lt;sup>2</sup> Application, App. 15.

Based upon our recommended pro forma operations, using an operating ratio of 88 percent, and making an allowance for the effects of income taxes, Commission Staff finds that South Shore has a revenue requirement from rates of \$831,351 - an increase of \$198,737, or 31.4 percent, over Commission Staff's normalized revenue from rates of \$632,614. Table 1 compares South Shore's revenue requirement shown in its application, South Shore's corrected revenue requirement, and Commission Staff's recommended revenue requirement.

Table 1: Reven	ue Re	equirement Co	mpai	rison			
	South Shore						
		Application		Corrected		Staff	
Operating Exp. Net of Income Tax	\$	766,254	\$	766,254	\$	707,105	
Divide by: Operating Ratio	<u>+</u>	88.00%	÷	88.00%	<u>÷</u>	88.00%	
Revenue to Cover Operating Ratio	\$	870,743	\$	870,743	\$	803,528	
Less: Operating Exp. Net of Income Tax	-	766,254	-	766,254	_	707,105	
Net Operating Income After Income Tax	\$	104,489	\$	104,489	\$	96,423	
Multiplied by: Gross-up Factor	_ X	1.6118633	X	1.6118633	x_	1.6118633	
Net Operating Income Before Income Tax	\$	168,422	\$	168,422	\$	155,421	
Add: Operating Exp. Net of Income Tax	+	766,254	+	766,254	+	707,105	
Interest on Long-Term Debt	+	0	+	0	+	3,162	
Less: Error	*	63,929		0	_	0	
Revenue Requirement	\$	870,747	\$	934,676	\$	865,688	
Less: Non-Operating Revenues	-	0	_	0		8,151	
Revenue Requirement - Operations	\$	870,747	\$	934,676	\$	857,537	
Less: Revenues - Nonrecurring Charges	-	0_	**	0	-	26,186	
Revenue Requirement - Water Sales	\$	870,747	\$	934,676	\$	831,351	
Less: Normalized Operating Revenues	-	650,297	-	650,297	_	632,614	
Revenue Requirement Increase	\$	220,450	\$	284,379	\$	198,737	
% Increase		33.9%		43.7%		31.4%	

Finding that South Shore's proposed rates will produce an unreasonable level of revenues, Commission Staff recommends that they be denied and rates set forth in Appendix D be approved in their place. South Shore proposes an across the board

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 $<sup>^{3}</sup>$  \$629,080 (Operating Revenue – Water) + \$3,534 (Fire Hydrant Revenue) = \$632,614.

percentage increase to its current rates. The Commission has previously accepted an across-the-board percentage increase as a reasonable means of allocating increases in the cost-of-service. Commission Staff recommends the acceptance of this methodology in this case.

Commission Staff has several concerns with South Shore's billing analysis.<sup>4</sup> First, South Shore's method for establishing minimum bill block usage and calculating the minimum bill revenue for its customers is inconsistent with accepted industry practice.<sup>5</sup> South Shore calculates the number of minimum bills by dividing the total revenue that its billing computer software reports by the current dollar amount assigned to its minimum bill block. Additionally, South Shore cannot calculate the total gallons allocated to this block as its current computer software program allows the entry of customer usage only in increments of 1,000 gallons. In effect South Shore's billing software assumes that any customer whose use falls within the minimum block usage and who uses less than 1,000 gallons in a single month has no water usage. Any analysis of usage from this computer software program for each block usage is skewed as the utility cannot analyze the actual monthly usage of its customers.

In seeking to establish fair, just and reasonable rates a sound analysis must be performed that reflects the actual cost of providing water service to each customer classification. That analysis must include a proper determination of the appropriate level for all customer classes has been evaluated for both revenue and expenses. During the review process, a proper analysis of the revenue for each rate schedule and

<sup>&</sup>lt;sup>4</sup> Application, App. 13.

<sup>&</sup>lt;sup>5</sup> See, e.g., American Water Works Association, *Principles of Water Rates, Fees and Charges* 82 (5th. ed. 2000).

each breakdown within the rate schedule should be completed to insure that revenues are being collected on a timely basis for all usage of all customers.

The limitations of South Shore's billing system have led South Shore to engage in billing practices that are likely to undermine the reliability of any billing analysis. South Shore currently enters a customer's usage into its billing system in 1,000 gallon increments. Only when a customer uses an amount that causes the meter to change the 1,000 gallon identifier will a customer be billed for a block usage in 1,000 gallon increments. If a customer uses less than 1,000 gallons, there is a "catch-up" in the next month when the usage will cause a change in the meter readout to the next 1,000 gallons and the customer is charged the minimum bill. Commission Staff is concerned that the current practice delays recovery of revenue and potentially shifts usage from one rate block to another rate block when it is billed in the following month.

Commission Staff recommends that South Shore review its current software. Commission Staff further recommends that South Shore obtain billing software that permits appropriate compiling, tracking and billing for a customer's usage during the month that the usage occurred. Such software would allow South Shore to review its customer's usage patterns and the revenue generated each month. Having the ability to evaluate the usage patterns of its customers would greatly aid the utility in determining the appropriateness of its current usage blocks and evaluating changes in those usage blocks.

# <u>Signatures</u>

Mark C. Frost
Prepared by: Mark C. Frost

Financial Analyst, Water and Sewer Revenue Requirements Branch Division of Financial Analysis

Prepared by: Eddie Beavers

Rate Analyst, Communications, Water

and Sewer Rate Design Branch Division of Financial Analysis

## APPENDIX A STAFF REPORT CASE NO. 2011-00039 SOUTH SHORE'S PRO FORMA OPERATIONS

	Test-Period			Pro Forma			
Account Titles	Operations		Ad	Adjustments		perations	
OPERATING REVENUES				<del></del>			
Service Revenues - Water	\$	643,117	\$	(19,006)	\$	624,111	
Fire Protection Revenues		0		0		0	
Penalties		11,714		0		11,714	
Nonrecurring Charges		14,472		0		14,472	
Total Operating Revenues	\$	669,303	\$	(19,006)	\$	650,297	
OPERATING EXPENSES							
Operation & Maintenance:							
Salaries & Wages - Employees	\$	246,764	\$	17,712	\$	264,476	
Employee Benefits		78,004		22,149		100,153	
Pensions		4,930		0		4,930	
Purchased Power		57,267		0		57,267	
Purchased Water		8,718		31,175		39,893	
Chemicals		15,179		0		15,179	
Materials & Supplies		57,954		21,013		78,967	
Contractual Services - Accounting		2,600		0		2,600	
Rental Office/Equipment		11,227		0		11,227	
Transportation		13,852		0		13,852	
Insurance		12,020		0		12,020	
Insurance - Workers Compensation		4,165		0		4,165	
Total Operation & Maint. Exp	\$	512,680	\$	92,049	\$	604,729	
Depreciation		81,079		0		81,079	
Amortization		35,607		711		36,318	
Property Tax		20,693		0		20,693	
FICA Tax		19,230		1,002		20,232	
Unemployment Tax		2,181		0		2,181	
PSC Assessment		1,022		0_		1,022	
Total Operating Expenses	\$	672,492	\$	93,762	\$_	766,254	
Net Operating Income	\$	(3,189)	\$	(112,768)	\$	(115,957)	
Other Income & Deductions:							
Jobbing Income		12,840		(6,420)		6,420	
Interest Income		1,229		0		1,229	
Other Income		2,127		(1,625)		502	
Interest Expense		5,115		(1,989)		3,126_	
Total Other Income & Deductions		11,081		(6,056)		5,025	
Net Inc. Available for Common	\$	7,892	\$	(118,824)	\$	(110,932)	

## APPENDIX B STAFF REPORT CASE NO. 2011-00039 COMMISSION STAFF'S PRO FORMA OPERATIONS

	Test-Period			[				
Account Titles	Operations		Adi	ustments	Ref	Op	Operations	
OPERATING REVENUES					***************************************	<u></u>		
Service Revenues - Water	\$	643,117	\$	(14,037)	(b)	\$	629,080	
Fire Protection Revenues		0		3,534	(c)		3,534	
Penalties		11,714		0	, ,		11,714	
Nonrecurring Charges		14,472		0			14,472	
Operating Revenues	\$	669,303	\$	(10,503)		\$	658,800	
OPERATING EXPENSES								
Operation & Maintenance:								
Salaries & Wages - Employees		246,764	\$	(19,140)	(d)	\$	227,624	
Employee Benefits		78,004		22,148	(a)		100,152	
Pensions		4,930		0			4,930	
Purchased Power		57,267		0			57,267	
Purchased Water		8,718		29,824	(e)		38,542	
Misc Water Treatment		0		21,141	(f)		21,141	
Chemicals		15,179		0			15,179	
Materials & Supplies		57,954		0			57,954	
Contractual Services - Accounting		2,600		0			2,600	
Rental Office/Equipment		11,227		0			11,227	
Transportation		13,852		0			13,852	
Insurance		12,020		0			12,020	
Insurance - Workers Compensation		4,165		0_			4,165	
Total Operation & Maint. Exp	\$	512,680	\$	53,973		\$	566,653	
Depreciation		81,079		(8,532)	(g)		72,547	
Amortization		35,607		(9,011)	(h)		26,596	
Property Tax		20,693		0			20,693	
Payroll Tax		19,230		(1,817)	(i)		17,413	
Unemployment Tax		2,181		0			2,181	
PSC Assessment		1,022		0			1,022	
Total Operating Expenses	\$	672,492	\$	34,613		\$	707,105	
Net Operating Income	\$	(3,189)	\$	(45,116)		\$	(48,305)	
Other Income & Deductions:			-					
Jobbing Income		12,840		(6,420)	(a)		6,420	
Interest Income		1,229		0			1,229	
Other Income		2,127		(1,625)	(a)		502	
Interest Expense	_	5,115		(1,953)	(a)		3,162	
Total Other Income & Deductions		11,081		(6,092)			4,989	
Net Inc. Available for Common	\$	7,892	\$	(51,208)		\$	(43,316)	

### APPENDIX C STAFF REPORT, CASE NO. 2011-00039 COMMISSION STAFF'S RECOMMENDED PRO FORMA ADJUSTMENTS

a. <u>Accepted Adjustments</u>. South Shore proposes the following adjustments to its test-period operations. A detailed explanation of each adjustment appears in the Application. Upon review of South Shore's adjustments and the supporting documentation, Commission Staff recommends the proposed adjustments be accepted.

Table 2								
Account Title	Adjus	tment						
Employee Benefits	\$	22,148						
Jobbing Income	\$	(6,420)						
Other Income	\$	(1,625)						
Interest Expense	\$	(1,953)						

b. <u>Metered Water Sales</u>. South Shore proposes to decrease its test-period operating revenue from water sales of \$669,303 by \$19,006 to a pro forma level of \$650,297. According to South Shore, changes is the method that the City of South Shore ("City") uses to feed the chlorine at the City's sewage treatment facility have resulted in a reduction in the City's water purchases. Using the City's water purchases for the months of October and November 2010, South Shore determined that the change would reduce the City's annual water purchases decrease by 6,378,000 gallons of water, or by \$19,006.<sup>2</sup>

Commission Staff finds that South Shore's proposed adjustment is reasonable and meets the ratemaking criteria of being known and measurable. Commission Staff

<sup>&</sup>lt;sup>1</sup> Application, App. 5.

 $<sup>^2</sup>$  33,000 (Gallons Sold Last Two Months of Test Period)  $\div$  2 Months = 16,500 (Average Gallons) x 12 Months = 198,000 (Normalized Sales – Gallons) – 6,576,000 (First 10 Months Test-Period Sales - Gallons) = 6,378,000 (Reduction in Gallons) x \$2.98 (Rate per 1,000 Gallons) = \$19,006.

further finds a longer period should be use to calculate the reduction in the City's annual water purchases. Using the City's water purchases for the eight month period from October 2010 through May 2011, Commission Staff determined that annual water sales would decrease by 5,695,000 gallons. Adjusting South Shore's billing analysis by this amount results in a decrease to test-period revenues from water sales of \$14,037 as shown in Table 3.

Table 3: Normalized Operating Revenue – Water Sales							
					Reduction		
Rate Block			Appl	ication	Gallons		Adjusted
First 1,000 Gal.			26,6	90,000	(12,000)	2	6,678,000
Next 9,000 Gal.			69,2	69,258,000 (108,000)			9,150,000
Over 10,000 Gal.			28,9	940,000	(5,575,500)	2	3,364,500
			124,8	388,000	(5,695,500)	11	9,192,500
Rate Block	Bills	Gallons		Curre	nt Rates	F	Revenue
First 1,000 Gal.	26,690	26,678,000	\$	9.95	Minimum	\$	265,566
Next 9,000 Gal.		69,150,000	\$	4.25	per 1,000 Gal.		293,888
Over 10,000 Gal.		23,364,500_	\$	2.98	per 1,000 Gal.		69,626
Normalized Revenue	e - Water	119,192,500				\$	629,080
Less: Test Period Operating Revenue - Water Sales							643,117
Pro Forma Adjustme	ent					\$	(14,037)

- c. <u>Fire Hydrant Revenue</u>. In the test period, South Shore reported mailing 288 bills to its fire hydrant customers.<sup>3</sup> By applying the current rate of \$12.27 to the 288 hydrant bills, Commission Staff calculates annual revenue for fire hydrants of \$3,534 and has adjusted operating revenues by that amount.
- d. <u>Salaries and Wages</u>. South Shore proposes to increase its test-period salaries and wages expense of \$246,764 by \$17,712 to reflect: (1) hiring a new employee on August 4, 2010; (2) increasing an employee's work days from 4 to 5 days

<sup>&</sup>lt;sup>3</sup> Application, App. 13.

per week; (3) the loss of an employee in the test period; and (3) employee wage increases that became effective on January 1, 2011.<sup>4</sup>

As South Shore's president and majority stockholder, George J. Hannah is responsible for managing the daily operations of South Shore. During the test period, Mr. Hannah received a salary of \$94,458, which South Shore proposes to increase to \$97,292.<sup>5</sup> In South Shore's previous three rate case proceedings<sup>6</sup> Mr. Hannah's salary was limited to \$49,028, \$51,303, and \$57,742, respectively.

Commission Staff notes that its review of South Shore's payroll records indicates that Mr. Hannah dedicates a significant amount of time to South Shore's management. However, South Shore has demonstrated that Mr. Hannah's duties and responsibilities have substantially changed since its last fully litigated rate case or that a salary of \$94,458 is reasonable compensation for him. As shown in Table 4, Commission Staff finds and recommends that Mr. Hannah's salary be limited for ratemaking purposes to \$63,096 based upon the methodology that the Commission has consistently applied.

	Table 4:	Calculation	on of M	lr. Hannah	ı's Salary	
Pro Forma Salary - C	ase No.	2007-0019	99			\$ 57,742
COLA for 2008	\$	57,742	х	1.03	COLA =	\$ 59,474
COLA for 2009	\$	59,474	х	1.03	COLA =	\$ 61,258
COLA for 2010	\$	61,258	X	1.03	COLA =	\$ 63,096

Using South Shore's current staff level, the 2011 employee wage rate, and using a salary level of \$63,096 for Mr. Hannah's salary, Commission Staff finds that pro forma salaries and wages expense should be \$227,624. Commission Staff's calculations are

<sup>&</sup>lt;sup>4</sup> *Id.*, App. 7, Adjustment b.

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<sup>&</sup>lt;sup>6</sup> Case No. 2002-00108, South Shore Water Works Co. (Ky. PSC Sep. 27, 2002); Case No. 2003-00044, South Shore Water Works Co. (Ky. PSC Jul 7, 2003); Case No. 2007-00199, South Shore Water Works Co. (Ky. PSC Mar. 24, 2008)

shown in Table 5. Accordingly, Commission Staff recommends that salaries and wages expense be decreased by \$19,140.

Table 5: Pro Forma Salaries and Wages							
	2009 Hours						
Employee	201	1 Wages	Regular	Overtime_		Salaries	
G Hannah			\		\$	63,096	
G Hall	\$	19.81	2,080	96.00		44,058	
C Robbins	\$	13.06	2,080	35.00		27,851	
L Davis	\$	11.48	2,080	44.00		24,636	
S Warnock	\$	10.62	2,080	0.50		22,098	
M. Porter	\$	8.91	2,080	110.00		20,003	
M Hunt	\$	7.50	2,080	32.00		15,960	
D Morre	\$	10.93	260	0.00		2,842	
B Hannah	\$	7.50	430	1.00		3,236	
L. Rickett	\$	7.50	460	35.00		3,844	
Pro Forma Salaries and Wages \$ 227,624							

e. <u>Purchased Water</u>. On February 1, 2011, the City of Greenup ("Greenup") increased its water rate to South Shore to \$3.51 per 1,000 gallons.<sup>7</sup> South Shore proposes to increase its test-period purchased water expense of \$8,718 by \$31,175 to a pro forma level of \$39,893 to reflect Greenup's increased bulk water rate.<sup>8</sup>

Commission Staff finds that an adjustment to reflect the increased bulk water rate meets the ratemaking criteria of known and measurable. By applying the increased bulk water rate of \$3.51 per 1,000 gallons to South Shore's test-period water purchases, Commission Staff calculates a pro forma purchased water expense of \$38,452, which is \$29,824 above the reported test period level. Accordingly, Commission Staff recommends that purchased water expense be increased by \$29,824.

f. <u>Sewer Service</u>. In 2011 at the direction of the Kentucky Division of Water, South Shore connected its water treatment facility to the City's sewer system. The City

<sup>&</sup>lt;sup>7</sup> Application, App. 10.

<sup>&</sup>lt;sup>8</sup> *Id*.

assesses a monthly fee of \$1,662 per month plus tax for treating the water treatment facility's discharge. Commission Staff finds that an adjustment to reflect the new sewer fee meets the ratemaking criteria of known and measurable. By multiplying the \$1,662 monthly fee by 12 months and applying a six percent sales tax, Commission Staff calculates an annual sewer fee of \$21,141. Accordingly, Commission Staff recommends that South Shore's pro forma operating expenses be increased by that amount.

g. <u>Depreciation</u>. South Shore reports a test period depreciation expense of \$81,079. Upon its review of the South Shore's depreciation schedule, Commission Staff finds that several items will be fully depreciated in calendar year 2011 and recommends that depreciation expense be decreased by \$8,532 to remove depreciation for such plant.

h. <u>Amortization</u>. South Shore proposes to increase its test-period amortization expense of \$35,607 by \$711 to a pro forma level of \$36,318. To support its proposed adjustment South Shore provided an amortization schedule that includes amortizing the \$7,500 cost of this case over three years.<sup>11</sup>

Commission Staff finds that the rate case cost is reasonable and that the associated amortization should be reflected in South Shore's pro forma operating expenses. Commission Staff further finds that several items listed in South Shore's

<sup>&</sup>lt;sup>9</sup> *Id.* App. 9.

 $<sup>^{10}</sup>$  \$1,662 (Monthly Sewer Fee) x 12 Months = \$19,944 x 1.06% (State Sales Tax) = \$21,141.

<sup>&</sup>lt;sup>11</sup> Application, Apps. 5 and 11.

amortization schedule will be fully amortized in calendar year 2011. Therefore, Commission Staff recommends that amortization expense be decreased by \$9,011 to remove amortization expense for such items and to reflect amortization of rate case expense over three years.

i. <u>Payroll Taxes</u>. South Shore proposes to increase its test period payroll tax expense of \$19,230 by \$1,002 to reflect the effect of adjustments to its test period salaries and wage expense on payroll taxes. By applying the current "FICA" rate of 7.65 percent to the pro forma salaries and wages expense of \$227,624, Commission Staff calculates a pro forma payroll tax expense of \$17,413, which is \$1,817 below the reported amount. Accordingly, Staff recommends decreasing payroll tax expense by that amount.

<sup>&</sup>lt;sup>12</sup> <u>Id.</u> App. 5.

<sup>&</sup>lt;sup>13</sup> \$227,624 (Pro Forma Salaries and Wages Expense) x 7.65% (FICA Rate) = \$17,413.

# APPENDIX D STAFF REPORT CASE NO. 2011-00039 COMMISSION STAFF'S RECOMMENDED WATER RATES

First Next Over	9.000	Gallons Gallons Gallons	\$ \$ \$	5.59	Minimum Bill Per 1,000 Gallons Per 1,000 Gallons
Fire Protec	ction		\$	16.12	Per Fire Hydrant

Honorable R. Benjamin Crittenden Attorney at Law Stites & Harbison 421 West Main Street P. O. Box 634 Frankfort, KENTUCKY 40602-0634

Honorable David Edward Spenard Assistant Attorney General Office of the Attorney General Utility & Rate 1024 Capital Center Drive Suite 200 Frankfort, KENTUCKY 40601-8204